

CBOR tags for IPv4 and IPv6 addresses and prefixes

draft-ietf-cbor-network-addresses-00

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<https://github.com/mcr/cbor-network-address>

Background

- Tag 260 and 261 exist.
- 260: IPv4 (if 4-bytes), IPv6 (if 16-bytes), Ethernet (if 6-bytes).
 - What about 8-byte Ethernet?
 - Forced to send 16 bytes, when many might be zeros.
- 261: seems to apply to maps, but prefixes in groups can be repeated, while keys should not be.
 - Also would be nice to know prefix length first.
 - Too complicated, not well enough documented

Proposed IPv6 tag

IPv6 Address

SUBNET

TBD1(

h'20010db81234abcd
000000000000c0ffee'

)

TBD1(

[64,
h'20010db81234'

]

)

Proposed IPv4 tag

IPv4 Address

SUBNET

TBD2(

h' C0000201'

)

TBD2(

[24,

h' C00002']

)

Issues and Next Steps

- What about arrays of addresses or prefixes?
 - not personally interesting
 - could be accomodated.
- Adopted March 3, 2021
- Ask for Early Allocation of tags.
 - Is a 1+1 tag justified?
- get immediate review

Conclusion

Either publish now, or:

could be merged into “notable tags”, if WG agrees to do early allocation of tags.

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